Guidelines on Project Reports (updated)

Initially the plan was:

- Restrict the <u>written group reports for Projects 1-2</u> to maximally the equivalent of five singlespaced typed pages of text, excluding figures, tables and bibliography. The report ideally contains an introduction, a description of what the project aims to achieve and it fits into the broader scientific context or the genetic epidemiology course, as well as a conclusions section. If citations are made to other papers, there should also be a bibliography. The body of the report provides answers to guiding questions provided in the project assignment. The final due date of the written reports: discussed in class
- <u>Projects 1 will be presented in the department/class</u>: TBE (approx. 30'). The presentation slides will be made available to course participants via the course website.

The new agreement consists of the following:

- <u>Projects 1 + 2 will be presented during a staff meeting on May 28 (from 3-5pm)</u>
 KVS will start with as small introduction (providing the context). Then Projects 1 and 2 are presented. Next, a small presentation is given by KVS on epistasis analysis in practice "GWAIs: Mission Impossible?" (time permitting). Staff and presenters are motivated to interact with each other.
- Prior to May 28, an extra session will be organized in Antwerp, to recapitulate concepts, to answer remaining questions on the course notes, to help resolve issues wrt the Project 1 + 2 presentations.
- Project 3 will be part of the <u>individual-based report combining Projects 1, 2, 3.</u> For more details; see next section. It will be presented on an individual basis on the day of the exam and will serve as a starting point for the oral exam.
- The <u>individual-based report is due by June 1</u>. Please use "genetic epidemiology UA" in the <u>subject title.</u>
- The oral exam takes place on June 7 (10-12 am)
- The nature of the assignments for Projects 1-3 (guiding questions, growing list of questions) make them ideal for assessing whether course learning outcomes have been attained.

The Individual-Based Report

The individual-base report is maximally the equivalent of 25 single-spaced typed pages of text, including figures, tables and bibliography.

You may build up this report using the following guiding questions:

- What is genetic epidemiology and what are the similarities / dissimilarities with epidemiology? [see growing list of questions]
- What are the different faces of genetic epidemiology? What are the associated key questions and main stream type of analysis techniques used to answer these questions? [see growing list of questions]
- What is a genetic association study?
- Specific questions from Project 2 [genetic association]?
- Is your DNA your destiny? NO ... continue with specific questions from Project 1 [epigenomics]
- Genome-wide association studies (GWAS) assaying hundreds of thousands of SNPs (Single Nucleotide Polymorphisms) in thousands of individuals have reproducibly identified hundreds of associations of common genetic variants for a variety of diseases and traits, yet can only explain part of the genetic heritability (what is heritability? See growing list of questions)
- Part of the "missing heritability" may be explained by ignored gene interactions.
- Specific questions from Project 3.
- Conclusions on importance of genetic epidemiology for personalized medicine or public health see also specific questions for Project 3.